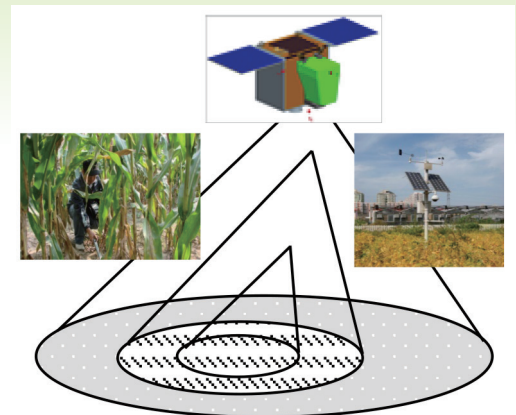


# REMOTE SENSING APPLICATION ON AGRICULTURE



The Agriculture nowadays is specialized and makes use of many technologies to improve production and quality of its products, remote sensing (RS) applications are used to support Agriculture developments, applications areas like to monitor and forecast crop acreage, growth and quality evaluation, as well as agricultural disaster monitoring and evaluation, precision agriculture, and grassland monitoring; require high level products with high-throughput, reliability, dynamism, phenology fast changes analysis and relatively low cost. The RS products should enable operators to analyze agriculture's status and to make accurate forecasts, this is part of what calls Precision Agriculture; in contrast traditional agricultural information extraction techniques are time-consuming, costly and handwork-consuming, and it does not meet the increasing demand of agricultural products.

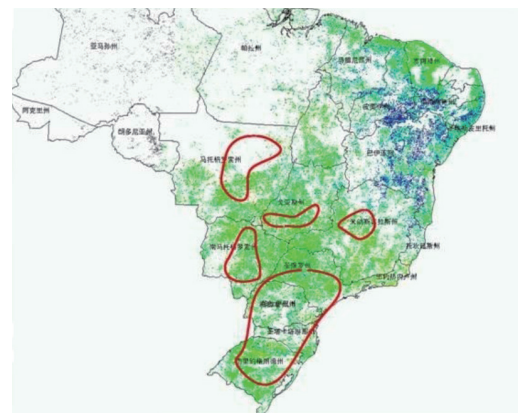
Satellite remote sensing



## OUR PROPOSAL

Remote sensing satellites can acquire ground information quickly and accurately. Combining GIS and GNSS, we can collect and analyze agricultural information. These information can be classified by time, quantity, location and objective automatically without the need of an operator. These technologies make agriculture decisions easier.

SSTC 's Typical Application System (TAS) is in grade to provide the products that Agriculture applications requires. We offers a system with all the capabilities to meet the precision agricultures developments.



The red region is the main soybean production area in Brazil

# REMOTE SENSING APPLICATION ON AGRICULTURE



## BASIC CONFIGURATION

- Crop acreage monitoring
- Crop growth monitoring
- Crop monitoring and forecasting
- Crop quality monitoring and evaluation
- Agricultural disaster monitoring and evaluation
- Environmental monitoring of agricultural resources

## APPLICABLE ORGANIZATION

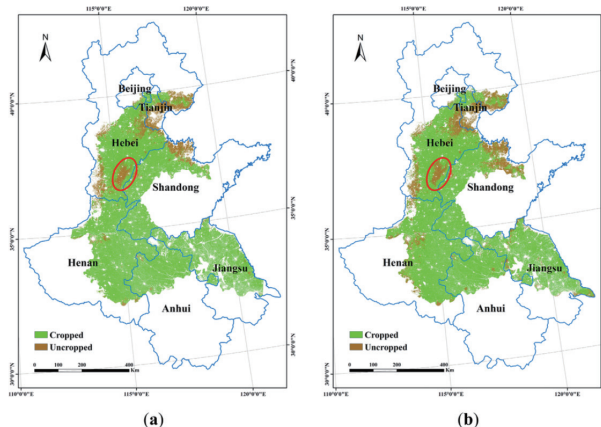
- Crop acreage monitoring
- Crop growth monitoring
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- Crop quality monitoring and evaluation
- Agricultural disaster monitoring and evaluation
- Environmental monitoring of agricultural resources

## SUPPORTED SATELLITES

- CBERS-4
- GF-1、GF-2、GF-3
- FY-3B、FY-4A
- Landsat-7、Landsat 8
- MODIS
- Thaichote-1
- AVHRR

## TAS PERFORMANCE FOR AGRICULTURE

- Automatic image processing: less than 5 minutes per 100 MB of data
- Crop growth estimation accuracy in major production areas is better than 90%
- Crop planting area estimation accuracy in major production areas is better than 90%
- Crop yield's estimation accuracy per unit area is better than 80%
- National crop yield estimation accuracy is better than 80%
- Crop planting structure precision is better than 85%
- Compound index's monitoring accuracy is over 85%



The distribution of cropped and uncropped arable land in 2010(a) and 2011(b)

